

**WHAT IS CLAIMED IS:**

1. A method of communicating between a client and a server,  
the method comprising:

5 if communication is from the client to the server,  
receiving compressed data at a proxy;  
decompressing the received compressed data; and  
communicating the uncompressed data to a specified  
server;

10 if communication is from the server to the client,  
receiving uncompressed data at the proxy;  
compressing the received uncompressed data; and  
communicating the compressed data to the client.

2. The method of claim 1, wherein the data is an extensible  
markup language (XML) document.

15 3. The method of claim 2, further comprising examining headers  
of the XML document.

4. The method of claim 1, wherein the proxy dynamically  
generates code space of uncompressed server responses.

20 5. The method of claim 1, wherein the proxy obtains code  
space of a request from the client.

6. The method of claim 1, wherein the client is a wireless  
device.

7. The method of claim 1, wherein the wireless device is a cell  
phone.

25 8. The method of claim 1, wherein the proxy removes any  
proxy-specific information from headers in the compressed data.

9. The method of claim 1, wherein the proxy dynamically generates new code space if code space does not exist to compress communication from the server to the client.

10. A compression proxy process comprising:

5 receiving a compressed request from a client, the compressed request including an XML document;

determining if code space corresponding to the XML document is available;

10 when the proxy has the correct code space, decompressing the XML document;

communicating the decompressed XML document to a specified server;

communicating a server response from the specified server;

determining if code space is available to compress the reply;

15 if code space is not available to compress the reply, dynamically generating a new code space;

if code space is available to compress the reply or after the new code space is generated, compressing the reply; and

communicating the compressed reply including a code space

20 version or identification header to the client.

11. The process of claim 10, wherein the XML document includes headers, the headers including information on an intended server uniform resource locator (URL).

25 12. The process of claim 10, wherein if the code space is not available, the server responds to the client with a request for the code space and the client replies with the requested data.

13. The process of claim 10, further comprising stripping proxy-specific header information from the XML document received from the

30 client.

14. A method of communicating documents from a client communicating compressed documents to a server communicating decompressed documents, the method comprising:

communicating a compressed request from a client to a  
5 proxy;

decompressing the compressed request at the proxy and communicating the decompressed request to a server;

communicating a response from the server to the proxy;

compressing the response at the proxy and communicating  
10 the response to the client;

and processing the response at the client.

15. The method of claim 14, wherein the client is a wireless device.

16. The method of claim 14, wherein the proxy removes any  
15 proxy-specific information from headers in the compressed request.

17. The method of claim 14, wherein the proxy dynamically generates new code space if code space does not exist to compress the response from the server.

18. The method of claim 14, wherein the compressed request  
20 from the client includes headers having an address of an intended server and a code space.

19. The method of claim 14, wherein the server is a Simple Object Access Protocol (SOAP) server.

20. The method of claim 14, wherein the server services both  
25 non-compressed and compressed requests.

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